**Meiosis Cartoon**

**Reference: Blue Book Pages: 155 and 161- 163**

Have 12 frames: Each frame needs at least ONE picture and a written description of the main points (what the chromosomes are doing) for that phase. You also must include the **type of chromosome** at that stage (chromatids, sister chromatids, homologous chromosomes).

1. **Title frame, indicate what type of gamete you are making.**
2. **Interphase, include all three stages in written description**
3. **Prophase I**
4. **Metaphase I**
5. **Anaphase I**
6. **Telophase I**
7. **Cytokinesis I**
8. **Prophase II**
9. **Metaphase II**
10. **Anaphase II**
11. **Telophase II**
12. **Cytokinesis II**

**Include:**

--**Subtitles** indicating all above phases **and** main points for each phase.

--**Subtitles** for *crossing over, genetic recombination* AND *independent assortment*

-- Centrioles and spindle fibers and nuclear membrane throughout.

--Show chromosome number 1 and number 2 and make number 1 big and number 2 small (this means you will have 2 chromosome 1’s one from mom and one from dad and 2 chromosome 2’s one from mom and one from dad)

--Use different colors for the mother's chromosomes and the father's chromosomes

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| --- | --- | --- |
| **Criteria**  | **Points**  | **Comments**  |
| Title frame | /2 |  |
| Interphase frame | /2 |  |
| Prophase I frame | /2 |  |
| Metaphase I frame | /2 |  |
| Anaphase I frame | /2 |  |
| Telophase I frame | /2 |  |
| Cytokinesis I frame | /2 |  |
| Prophase II frame | /2 |  |
| Metaphase II frame | /2 |  |
| Anaphase II frame | /2 |  |
| Telophase II frame | /2 |  |
| Cytokinesis II frame | /2 |  |
| Crossing over, genetic recombination and independent assortment accurately represented  | /3 |  |
| Centrioles and spindle fibers and nuclear membrane accurately represented throughout  | /3 |  |
| Chromosome 1 and 2 accurately represented throughout | /3 |  |
| Neatness, Name and **Turning in this rubric with Cartoon**  | /2 |  |
| **Total**  | /35 |  |